



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,332	09/24/2001	Jukka Seppala	324-010518-US (PAR)	1192
2512	7590	08/03/2005	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			LEVITAN, DMITRY	
			ART UNIT	PAPER NUMBER

2662

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,332

Applicant(s)

SEPPALA ET AL.

Examiner

Dmitry Levitan

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2662

Preliminary amendment, filed 09/24/01, has been entered. Claims 1-18 remain pending.

Claim Objections

1. Claim 1 is objected to because of the following informalities: Claim 1 recites the limitation "the serving network element" in line 11. There is insufficient antecedent basis for this limitation in the claim.
2. Claim 7 is objected to because of the following informalities: Claim 7 recites the limitation "the serving network element" in line 8. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 2 is objected to because of the following informalities: claim limitation "periodically and/or at the request of a mobile node" is unclear, because it is not understood what is the limitation of the claim: "periodically and at the request of a mobile node" or "periodically or at the request of a mobile node".
4. Claims 3 and 16 are objected to because of the following informalities: "the foreign agent that ... can best take care of data transmission of the mobile node" is unclear, because the meaning of "best take care" is not understood in the context of the claim.
5. Claim 4 is objected to because of the following informalities: Claim 4 recites the limitation "the connection" in lines 4-6. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 18 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Advertising message of claim 18 is a non-statutory subject matter, because it is not directed to a method, a machine or a composition of matter.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-17 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (IP mobility support RFC 2002, October, 1996, pp. 1-56) in view of Feder (US 6,522,881).

4. Regarding claims 1 and 7, Perkins substantially teaches their limitations:

A method, network element, router and mobile node (outline of operation of Mobile IP protocol on page 8) using mobility agents in a telecommunication system (foreign agents and

Art Unit: 2662

home agents on page 8), which comprises at least one mobile node supporting mobile IP (mobile node on Figure on page 11) and several network elements, of which at least one comprises one or more mobility agents configured to transmit advertising messages to mobile nodes (foreign agent as shown on Figure on page 11, transmitting advertising messages to mobile nodes on page 14, wherein foreign agent is operating as a router, because it implements standard IP routing mechanisms, page 10), the method comprising transmitting information on the attributes of one or more network elements from mobility agents to at least one mobile node (transmitting a mobility agent advertisement extension as shown on page 16, comprising field B, "Busy", indicating that the foreign agent will not accept registrations from additional mobile nodes, page 17)

Perkins does not teach several serving elements and using said information in the mobile node in the selection of the serving network element.

Feder teaches several serving elements (multiple access points as shown on Fig. 2 and 2:4-15) and selection of the serving network element by a mobile node (selecting access points based on their load and performance 2:16-33) .

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add several serving elements and a selection of the serving network element by a mobile node of Feder to the system of Perkins to improve the system operation in the condition of the foreign agent overload, when it is consistently busy, by adding more serving elements with foreign agents increasing the system capacity.

5. Regarding claims 11, 13 and 15, Perkins in view of Feder substantially teaches their limitations (see rejection of claims 1 and 7 above).

Art Unit: 2662

Perkins in view of Feder does not teach means for transmitting advertising messages, means for collecting information, means for transmitting the information, reception means and processing means.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add means for transmitting advertising messages, means for collecting information, means for transmitting the information, reception means and processing means to the method of Perkins in view of Feder to implement the method into an operational system, because claimed means implement directly the appropriate method steps.

6. Regarding claim 2, Perkins teaches transmitting advertising messages including care-of address (acquisition of care-of address on page 9) periodically (sending advertisements periodically on page 16) and at the request of a mobile node (mobile node agent solicitation procedure on page 21).

7. Regarding claims 3-6 and 12, Feder teaches comparing attributes of different foreign agents in the mobile wireless node on the basis of the information/load received from the foreign agents (comparing the access nodes load information, transmitted by access points beacons 6:9-12),

Selecting the best foreign agent based on the load of the foreign agents (selecting the best access point, based on the access points received load levels 6:62-7:5 and radio channel measurements 6:40-50), and

Registering with the selected foreign agent (inherently part of the system, because registering with the best of access points is essential for the system operation).

Art Unit: 2662

8. Regarding claims 8-10, 14, Feder teaches comparing attributes of different foreign agents/routers (foreign agent is operating as a router, because it implements standard IP routing mechanisms, page 10) in the mobile wireless node on the basis of the information/load received from the foreign agents/routers (comparing the access nodes load information, transmitted by access points beacons 6:9-12),
Selecting the best foreign agent/router (selecting the best access point, based on the access points received load levels 6:62-7:5 and radio channel measurements 6:40-50), and
Establishing connection between the mobile node and the selected access point/foreign agent/router (inherently part of the system, because registering with the best of access points is essential for the system operation).
9. Regarding claims 16 and 17, Feder teaches comparing attributes of different foreign agents in the mobile node on the basis of the information/load received from the foreign agents (comparing the access nodes load information, transmitted by access points beacons 6:9-12),
Selecting the best foreign agent (selecting the best access point, based on the access points received load levels 6:62-7:5 and radio channel measurements 6:40-50), and
Registering with the selected foreign agent (inherently part of the system, because registering with the best of access points is essential for the system operation), utilizing the mobile node processing means.

Art Unit: 2662

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'DL' followed by a stylized name.

Dmitry Levitan
Patent Examiner.
07/26/05